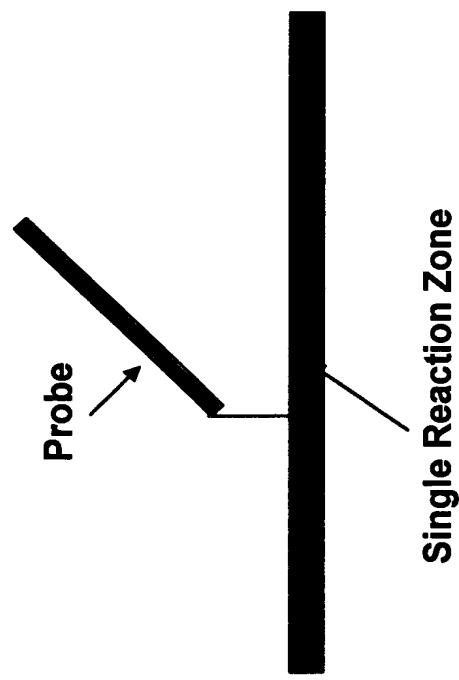


Southern 1 - The components



Single Template



Single Reaction Zone

Southern 2 – Hybridising a template to probe present in a reaction zone

Method disclosed in Southern

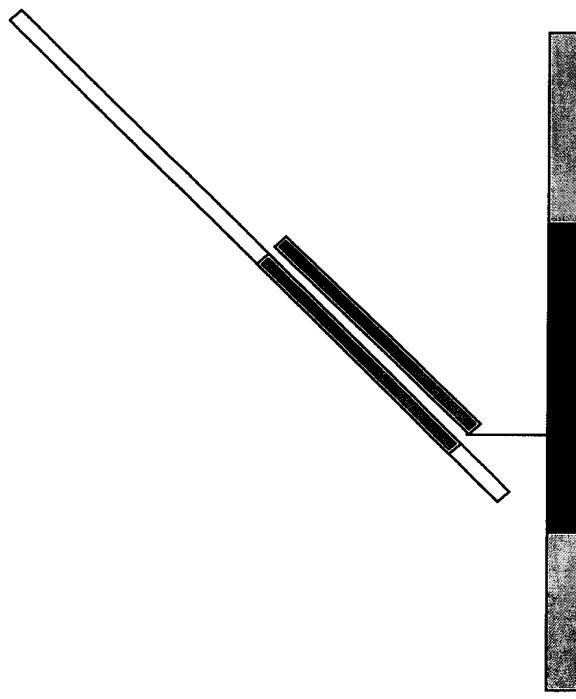
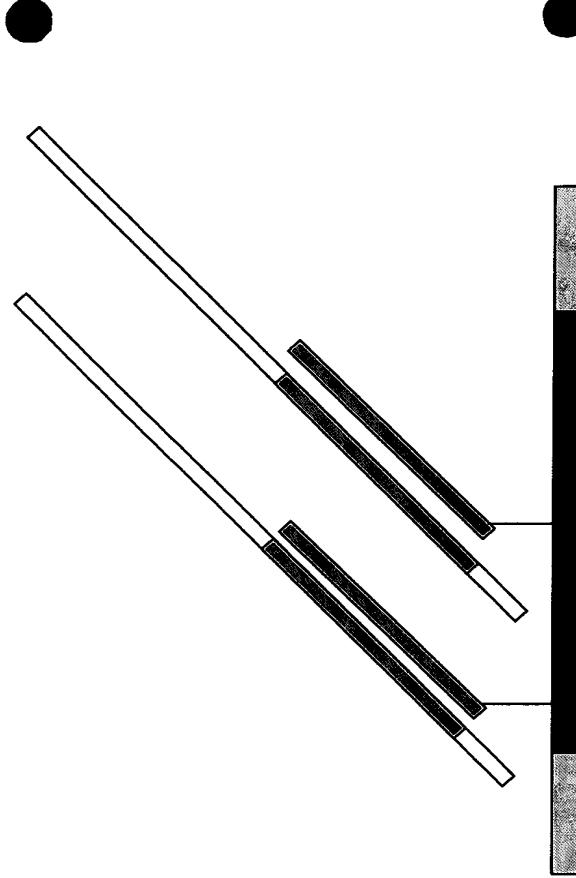
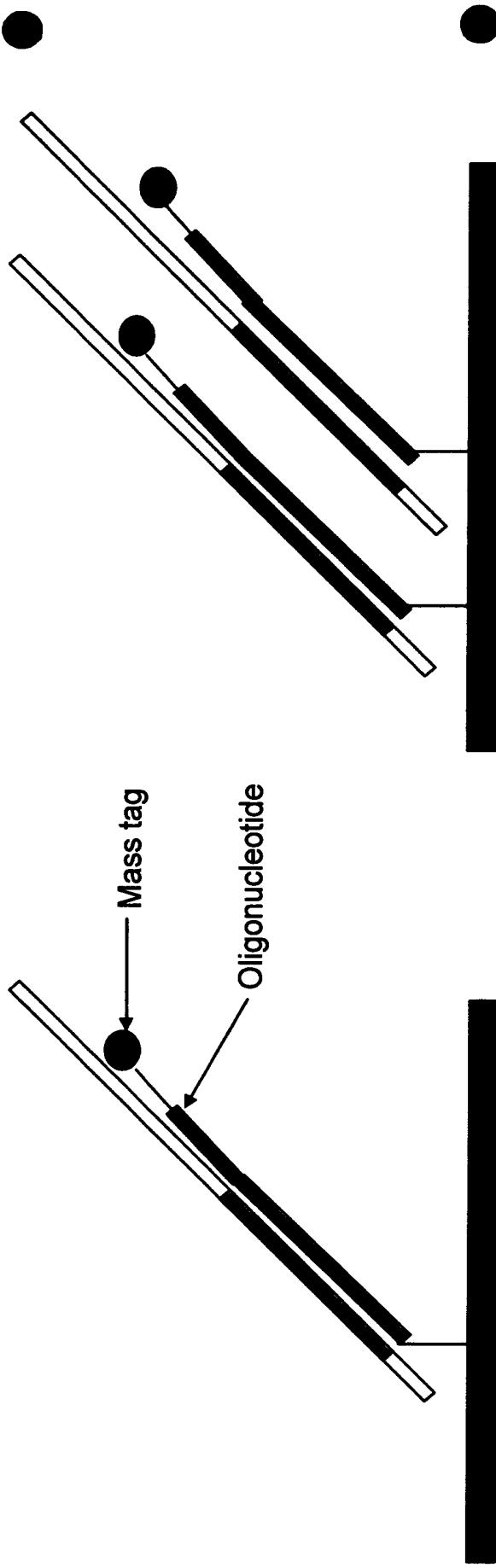


Diagram showing why the method of
Southern does not permit sequencing of two
templates in a single reaction zone

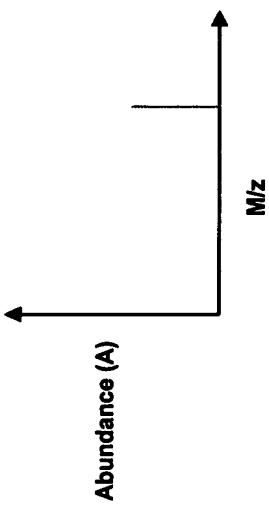


Southern 3 - Ligating Mass Tagged Oligonucleotides

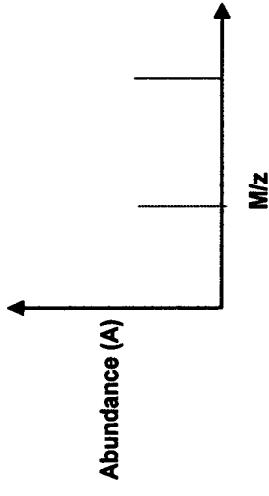


Southern 4 - Cleave, Desorb and Detect Mass Tags

Mass spectrum showing mass and abundance of released mass tags



Mass spectrum showing mass and abundance of released mass tags



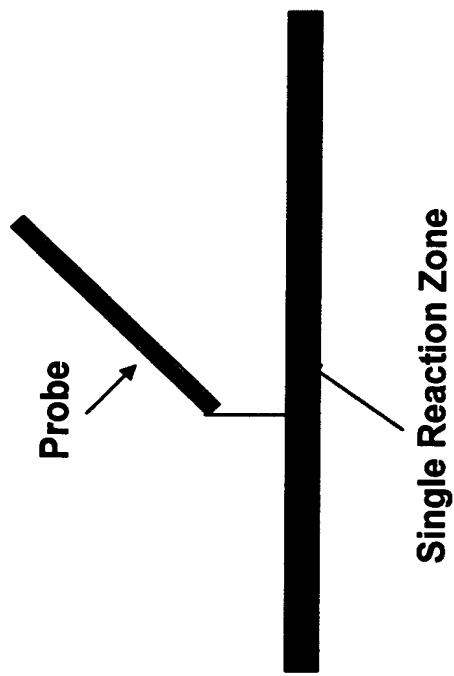
The mass tag detected is used to identify the sequence of the template adjacent to the region complementary to the probe

The mass tag detected cannot be assigned to a template and therefore, no sequence information can be obtained for either template

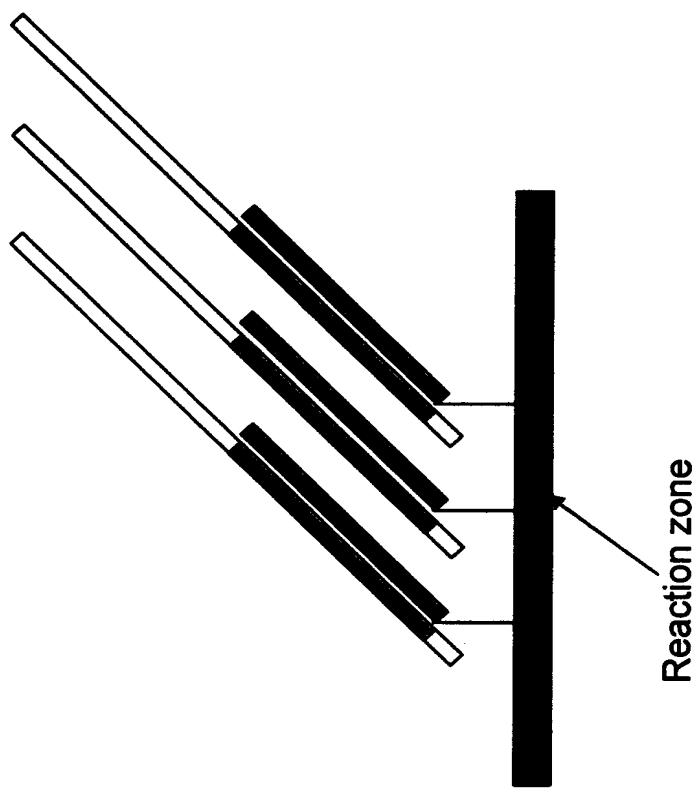
Schmidt & Thompson 1 - The components



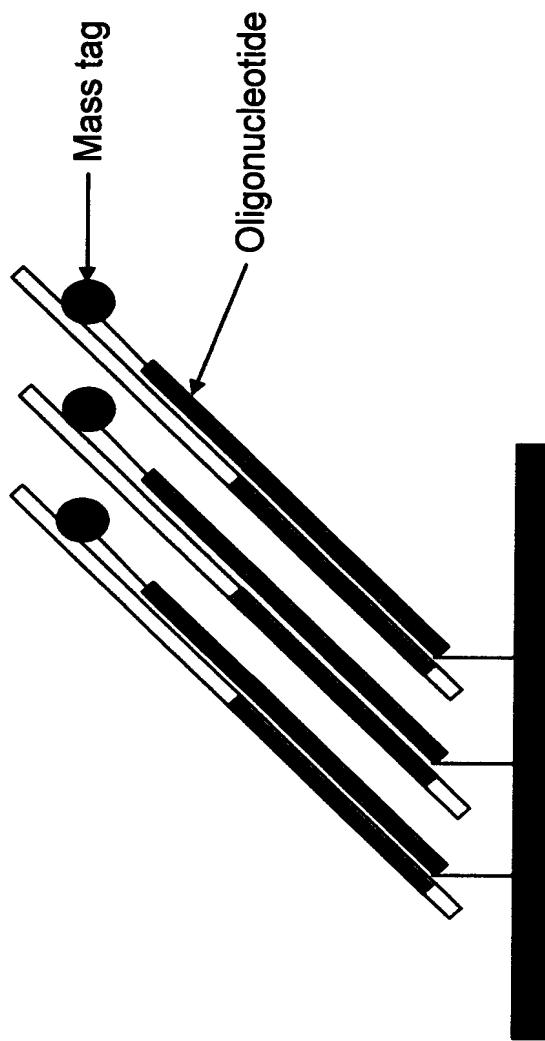
2 or more Templates in different quantities



Schmidt & Thompson 2 - Hybridising templates to a probe present in a reaction zone

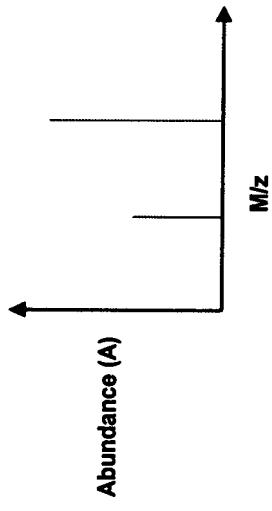


Schmidt & Thompson 3 - Ligating Mass Tagged Oligonucleotides



Schmidt & Thompson 4 - Cleave and Detect Mass Tags

Mass Spectrum showing mass and abundance of mass tags



The abundance of each mass tag detected is used to identify the template to which it relates. Each mass tag is then used to identify the sequence of the corresponding template.

